

content of the paper and computer readable copies are the same and contain no new matter, as required by 37 C.F.R. §1.821, are submitted herewith. Also submitted herewith is a request for a one month extension of time as specified under 37 C.F.R. §1.136(a), including a payment of the appropriate fee. Please amend the above-identified application as follows:

#### IN THE SPECIFICATION

Please amend the sequence listing by substituting the enclosed paper copy of the Sequence Listing and a computer readable copy submitted in accordance with 37 C.F.R. §1.821-1.825.

Please amend the text of the specification as follows.

On page 11, please substitute the paragraph on lines 16-29 with,

"Initially, primer pairs, either a sense primer BSYNNDE, encoding amino acids 1-7 of  $\beta$ -synuclein (SEQ ID NO: 1) and an NdeI site at its 5' end, and an antisense primer, corresponding to amino acids 73-83 of  $\alpha$ -synuclein and amino acids 66-72 of  $\beta$ -synuclein (SEQ ID NO: 2), or a sense primer, corresponding to amino acids 73-83 of  $\alpha$ -synuclein and amino acids 73-79 of  $\beta$ -synuclein (SEQ ID NO: 3) and an antisense primer BSYNNOT encoding amino acids 129-134 of  $\beta$ -synuclein and NotI site at its 5'end (SEQ ID NO: 4) are incubated in PCR with plasmid pCEP4-human  $\beta$ -synuclein as a template. Individual PCR products are gel-purified and an aliquot of each product is combed with primers BSYNNDE (SEQ ID NO: 1) and BSYNNOT (SEQ ID NO: 4) to synthesize a full length of  $\beta$ -synuclein  $\delta 1$  cDNA. The resulting PCR product is digested with NdeI and NotI and ligated to PROEX-1 previously digested with NdeI and NotI, finally to produce PROEX-1- $\beta$ -synuclein  $\delta 1$ ."

On page 11, line 30 through page 12, line 7, please substitute the paragraph with,

"PROEX-1- $\beta$ -synuclein  $\delta 2$  is similarly constructed by a two-step PCR protocol

using PROEX-1- $\beta$ -synuclein  $\delta$ 1 as a template. Initial primer pairs are either BSYNNDE (SEQ ID NO: 1) and an antisense primer corresponding to amino acids 55-62 of  $\beta$ -synuclein and amino acids 63-72 of  $\alpha$ -synuclein (SEQ ID NO: 5) or a sense primer encoding amino acids 63-79 of  $\alpha$ -synuclein (SEQ ID NO: 6), and BSYNNOT (SEQ ID NO: 4). For both of the newly-constructed plasmids, fidelity of the sequencing is confirmed using a commercially available delta taq cycle sequencing kit (Amersham)."

On page 13, please substitute the paragraph on lines 12-22 with,

"NACP/ $\alpha$ -synuclein-specific polyclonal antibody (anti-NACP101-124) is raised against the synthetic peptide 'GKGEEGYPDEGILEDMPVDPGSEA' (SEQ ID NO: 9) which is derived from residues 101-124 of NACP/ $\alpha$ -synuclein. Immunoblotting analysis is performed as described above, the method of which is well known to those in the art. Briefly, each sample is resolved by SDS-PAGE (15%) and blotted onto nitrocellulose membrane (Schleicher & Schuell, Keene, NH) using a standard transfer apparatus. The membrane is then blocked with TBS containing 3% BSA, followed by an incubation with anti-NACP101-124 (1:1000) in TBS containing 1% BSA. The treated membrane is then incubated with  $^{125}$ I-labeled protein A (ICN, Costa Mesa, CA), followed by autoradiography."

On page 14, please substitute the paragraph on lines 5-11 with,

"Human  $\alpha$ -synuclein is a 140 amino-acid molecule (SEQ ID NO:10) that is encoded by a gene on chromosome 4 and was originally isolated from plaques of Alzheimer disease brains. Involved in synaptic function and neural plasticity, this 19 kD protein is a precursor of the highly hydrophobic 35 amino-acid metabolite, non-amyloid component (NAC). The NAC peptide can self-aggregate into fibrils and induces aggregation of the A $\beta$  peptide."